

## 5.0 RECOMMENDATIONS

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### Herrig Brothers Farm

1. Install protection (i.e., fencing or barricades) to protect aboveground propane pipes from possible damage from vehicles. (98-007-I-IA-R1)
2. Install properly sized propane outlet piping from excess flow valves. (98-007-I-IA-R2)

### Iowa State Fire Marshal

Develop a program to ensure implementation of the requirements of the National Fire Protection Association's *NFPA-58 Standard for the Storage and Handling of Liquefied Petroleum Gases*, as adopted by Iowa law. Ensure that this program includes, at a minimum, the following elements:

- Designation by regulation of the party (such as a facility owner or installer) who is responsible for submitting planned construction or modification documents to the State Fire Marshal; (98-007-I-IA-R3)
- Procedures for approving the plans for new or modified installations; (98-007-I-IA-R4)
- Procedures governing the issuance and posting of permits authorizing the use of equipment; (98-007-I-IA-R5) and
- On-site inspections of new, modified, and existing propane and other Liquefied Petroleum Gas storage facilities that are covered by Iowa state law. (98-007-I-IA-R6)

## **Fire Service Institute of Iowa State University**

Ensure that fire fighter training materials address proper response procedures for BLEVEs. (98-007-I-IA-R7)

## **National Propane Gas Association (NPGA)**

1. Ensure that fire fighter-training materials address proper response procedures for BLEVEs. (98-007-I-IA-R8)
2. Distribute the CSB findings and recommendations in this report to NPGA members. (98-007-I-IA-R9)

## **BY THE CHEMICAL SAFETY AND HAZARD INVESTIGATION BOARD**

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